RECOVERY CURRICULUM

Subject: CS
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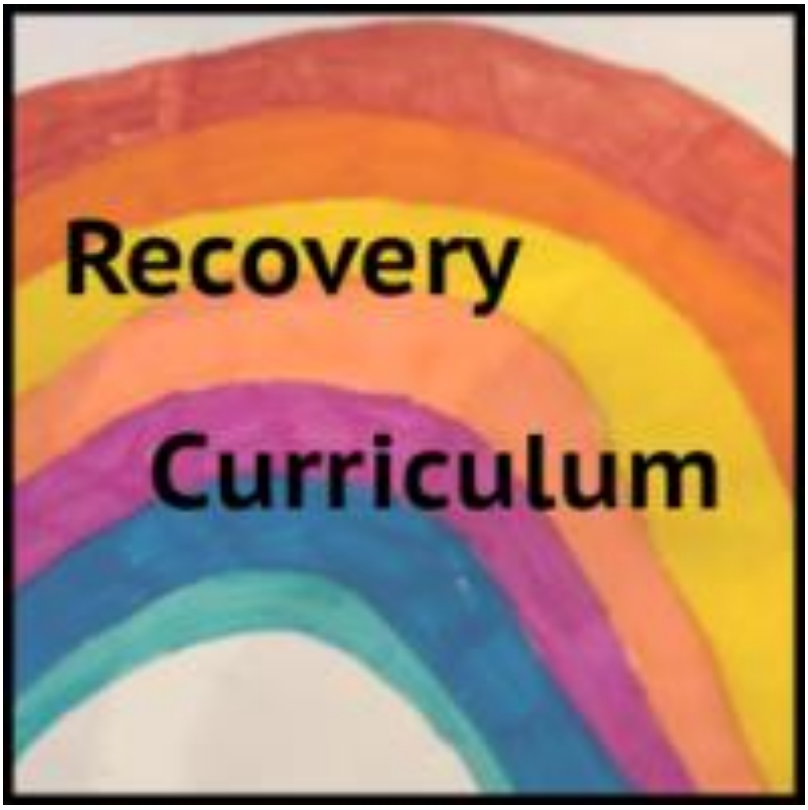

Subject:	CS	Teacher:	Lead: CMI
Year:	8	Class:	All
Unit title:	Cyber Security		
Duration:	6 lessons		

Intent

Intent Statement - at Landau Forte Amington, we believe learning powerful knowledge helps students achieve and creates a fairer society. How are you trying to accomplish this, with this unit/topic?

This topic will focus on student recovery following the pandemic, which has resulted in students experiencing the following possible losses: routine, structure, friendship, opportunity and freedom. It will support students academically, socially and emotionally, in order to transition students back to Academy life and support with the issues resulting from loss.

Aims - what do you want pupils to be able to know and do by the time they finish this unit/topic?

Are responsible, competent, confident and creative users of information and communication technology.
Become digitally literate in order to able to use, and express themselves and develop their ideas through, information and communication technology
Become digitally literate in order to become active participants in a digital society and workplace

Academy values – at Landau Forte Amington, we want students to be ambitious, brave and kind. How are these values promoted in this PoS?

Brave: Empower pupils to become digitally literate in order to able to use, and express themselves and develop their ideas through, information and communication technology.

Ambitious: Delivery of challenging concepts and ideas.

Kind: To become digitally literate in order to become active participants in a digital society and workplace. To be safe and considerate users of the internet and digital learning platforms.

Content – what is being covered, ensuring breadth & depth?	National Curriculum/Exam Specification - how does the content link to the NC or Exam Spec?
Topics: Cyber Security Primary and Secondary Data This SOW has removed the representation topic as it was not started in year 7. It will be planned to be covered in more detail at the end of the year.	Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users Create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns.

Powerful Knowledge - what powerful knowledge is included in this SoW? Consider what knowledge is it important for our students to know, so that when they leave school they can engage in and lead discussions, with people from the most advantaged backgrounds?
How pupils can stay safe online in relation to their age.

Implementation

GAPS	
Identification – how are you going to identify the gaps in knowledge/skills?	**Triage** – how are you going to rank order these gaps in knowledge/skills and 'fill' them, in order of importance?
Create a baseline test of programming knowledge before the programming unit at the start of term. This will identify uptake/ areas of confusion etc.	Cyber security project will run first as identified as a key topic for blended learning /learning from home. Moral obligation of safety means it should be taught first.

	The results of the of the baseline test will determine if a group needs to revisit a year 7 topic or spend extended time on a topic in year 8.
KEY CONCEPTS	
Key Concepts – what are the key concepts being taught?	**Progression** – how will studying these key concepts support progression to the traditional curriculum that has been planned?
Cyber Security: Cyber threats and online protection. Primary and Secondary Data: Types, uses and selection.	Allows pupils to refine knowledge and understanding in preparation for KS4. Taken from traditional curriculum but reordered to allow learning without ICT access. This will hopefully allow learners to use the ICT facilities for programming units.
WELLBEING	
Lockdown – how will students share their experiences of lockdown?	**Social and Emotional** – how will student social and emotional health be supported?
Cyber security tasks will relate to pupil experiences for example: issues of security using house party in lockdown. Data lesson will relate to pupils experiences of using different research methods in lockdown. Discussions on how they found using technology helped them when working from home. Conversations and resources linking how beneficial technology was in keeping people communicating during lockdown and how technology helped peoples social and emotional health thanks to this technology	The big discussion will be part of a pupils learning during tutor time. This will encourage pupil dialogue and discuss issues of technologies impact on social and emotional wellbeing. For example is Facebook a positive for society? Conversations and resources linking how beneficial technology was in keeping people communicating during lockdown and how technology helped peoples social and emotional health thanks to this technology Conversations and resources linking how beneficial technology was in keeping people communicating during lockdown and how

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RE-ESTABLISH	
Learning Skills – how are you going to re-establish the skills for learning?	**Relationships** – how are you going to re-establish classroom relationships?
Introduction lesson: create rules for the Computer Science classroom. Discussion of exam key words. Computing baseline. Routine in look and structure of lesson with recap lessons at the end of each cycle.	Introduction focused on kindness and compassion The big discussion will be part of a pupils learning during tutor time. This will encourage pupil dialogue and discuss issues of technologies impact on social and emotional wellbeing. For example is Facebook a positive for society? Reintroduction of rules.
OPPORTUNITIES	
Discussion – what are the discussion based opportunities?	**Group** – what are the group work based opportunities (while still ensuring social distancing)?
The big discussion will be part of a pupils learning during tutor time. This will encourage pupil dialogue and discuss issues of technologies impact on social and emotional wellbeing. For example is Facebook a positive for society?	The big discussion will be part of a pupils learning during tutor time. This will encourage pupil dialogue and discuss issues of technologies impact on social and emotional wellbeing. For example is Facebook a positive for society?

Discussion of rules of the classroom including the virtual classroom. Classroom discussions will take place each lesson on topical issues such as phishing during lockdown, house party hijacking and good practice such as passwords etc.	Work can be marked and improved by peers using the visualizer on the board.

Delivery

<table>
<tr><td rowspan="4">1</td><td rowspan="3">Number of lessons in cycle:</td><td colspan="2">1) Lesson Type
(classroom or blended for remote homework)</td><td>2) DNA
(Do Now Activity/Reading)</td><td colspan="2">3) Learning Intentions
(what, why & how)</td></tr>
<tr><td>Classroom
(whole sequence completed)</td><td>☐</td><td rowspan="2">BEBRAS Computational Thinking Questions</td><td colspan="2" rowspan="2"><table><tr><td>What</td><td>What is Cyber Security and how can you stay safe?</td></tr><tr><td>Why</td><td>To understand what a cyber security breach may look like, and how to protect yourself online</td></tr><tr><td>How</td><td>You will have a strong understanding of what it means to be safe online, and how to spot potential risks</td></tr></table></td></tr>
<tr><td>Blended
(live and remote as independent study)
IF A BLENDED LEARNING APPROACH IS REQUIRED, AN ALTERNATIVE LESSON ON THE SAME CONTENT IF AVAILABLE FROM THE TEACH COMPUTING HOME TEACHING REPOSITORY (6 LESSONS AVAILABLE).</td><td>☐</td></tr>
<tr><td colspan="2">4) New Material
(previous learning/ new material)</td><td>5) Check for Understanding
(questioning/checking)</td><td>6) Prepare for Practice
(model/ scaffold)</td><td rowspan="2">Synchronous (live)</td></tr>
<tr><td colspan="2">• What is meant by Cyber Security?
• The range of Cyber Attacks (internal/external)</td><td>Targeted questioning.
Mini whiteboards
Open-ended questions, leading to class discussions</td><td>Demonstrate/showcase a high-level example of work</td></tr>
<tr><td colspan="2">7) Deliberate Practice
(guided/ independent)</td><td>8) Feedback
(light/deep)</td><td>9) Review
(daily/monthly)</td><td rowspan="2">Asynchronous (remote)</td></tr>
<tr><td colspan="2">Write definitions and explain the different types of Cyber Security Issues / Cyber attacks</td><td>Compare student definitions and explanations to actual definitions</td><td>Cyber security exit ticket</td></tr>
</table>

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<tr><td>Classroom
(whole sequence completed)</td><td>☐</td><td rowspan="2">BEBRAS Computational Thinking Questions</td><td colspan="2" rowspan="2"><table><tr><td>What</td><td>To know the difference between primary and secondary data</td></tr><tr><td>Why</td><td>To understand the difference in value and reliability between primary and secondary information</td></tr><tr><td>How</td><td>You will understand and be able to create/use different forms of information</td></tr></table></td></tr>
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<tr><td>Explanation of what makes data primary/secondary
Describe the differences between the two forms of data</td><td>Provide examples of sources, and have students determine whether they think it is Primary or Secondary data</td><td>Good/Bad examples of ways to collect primary data.</td></tr>
<tr><td>7) Deliberate Practice
(guided/ independent)</td><td>8) Feedback
(light/deep)</td><td>9) Review
(daily/monthly)</td><td rowspan="2">Asynchronous (remote)</td></tr>
<tr><td>Practice composing good questions that would be effective for collecting primary data</td><td>Compare qualities of questions to a checklist in pairs/with peers (in case of home-study, self-assess)</td><td></td></tr>
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	Number of lessons in cycle:	4) New Material (previous learning/ new material)	5) Check for Understanding (questioning/checking)	6) Prepare for Practice (model/ scaffold)	Synchronous (live)
		What makes a good and unbiased questionnaire	Mini whiteboards Targeted questioning Open-ended questions leading to discussions	Demonstrate examples of good practice	
		7) Deliberate Practice (guided/ independent)	8) Feedback (light/deep)	9) Review (daily/monthly)	Asynchronous (remote)
		Students to individually create a questionnaire to collect information on how "Cyber Safe" people are. Students roll out questionnaire to tutor and peers and collect responses	RAG questionnaires with a checklist	Questionnaire/ Quiz exit ticket	
4		1) Lesson Type (classroom or blended for remote homework)	2) DNA (Do Now Activity/Reading)	3) Learning Intentions (what, why & how)	
		Classroom (whole sequence completed) ☐	BEBRAS Computational Thinking Questions	What: To analyse data collected and know how to effectively present information collected Why: To create purposeful and effective information from the data you have collected How: You will be able to effectively present and interpret the primary data you have collected	
		Blended (live and remote as independent study) **IF A BLENDED LEARNING APPROACH IS REQUIRED, AN ALTERNATIVE LESSON ON THE SAME CONTENT IF AVAILABLE FROM THE TEACH COMPUTING HOME TEACHING REPOSITORY (6 LESSONS AVAILABLE).** ☐			
	Number of lessons in cycle:	4) New Material (previous learning/ new material)	5) Check for Understanding (questioning/checking)	6) Prepare for Practice (model/ scaffold)	Synchronous (live)
		The importance of data presentation, and how to interpret primary data collected	Targeted questioning Mini quiz Class discussions	Demonstrate examples of good practice	
		7) Deliberate Practice (guided/ independent)	8) Feedback (light/deep)	9) Review (daily/monthly)	Asyn chro

		Students use the information collated from their questionnaires and try to make sense and present the information collected. Summarise the information collected in an unbiased way.	Live feedback to students, analysing their collated information and evaluating how effective they have been at portraying the information collected through the questionnaire		
5		1) Lesson Type (classroom or blended for remote homework)	2) DNA (Do Now Activity/Reading)	3) Learning Intentions (what, why & how)	
		Classroom (whole sequence completed) ☐	BEBRAS Computational Thinking Questions	What: To create a quiz using a combination of primary and secondary data Why: To know how to create a resource using primary and secondary data as an influence How: You will have created an effective quiz combining data you have collected (primary) and data you have researched (secondary)	
		Blended (live and remote as independent study) **IF A BLENDED LEARNING APPROACH IS REQUIRED, AN ALTERNATIVE LESSON ON THE SAME CONTENT IF AVAILABLE FROM THE TEACH COMPUTING HOME TEACHING REPOSITORY (6 LESSONS AVAILABLE).** ☐			
	Number of lessons in cycle:	4) New Material (previous learning/ new material)	5) Check for Understanding (questioning/checking)	6) Prepare for Practice (model/ scaffold)	Synchronous (live)
		How to create an effective and challenging quiz. How to present information alongside a quiz	Targeted questioning Mini quiz Class discussions	Demonstrate examples of good practice	
		7) Deliberate Practice (guided/ independent)	8) Feedback (light/deep)	9) Review (daily/monthly)	Asynchronous (remote)
		Students create a cyber security quiz, which takes influence from both the primary data the student has collected, as well as the secondary data they have found in textbooks/from other students	RAG quizes with a checklist	Cyber Security/ Questionnaire/ Quiz exit ticket	